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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/564,206

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Arndt Glaesser

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EXAMINER

HOWELL, DANIEL W

ART UNIT

PAPER NUMBER

3726

MAIL DATE

DELIVERY MODE

10/14/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/564,206	Applicant(s) GLAESSER, ARNDT	
	Examiner Daniel W. Howell	Art Unit 3726	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-17, 19-23, 25, 27 and 28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-17, 19-23, 25, 27, 28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 3726

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 8-17, 19-23, 25, and 27-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Koch (2001/0048857). The invention is described throughout the entire reference, such that it is advised to read the entire Koch document. Paragraphs [0003-0004] discuss the difficulty of machining “deeply recessed, hollowed out spaces” in workpieces, including parts used in the automobile and aircraft industry, such that it is clear that Koch contemplated the device being used to make a bladed rotor. Paragraph [0041] discusses making a CAD model of the workpiece to be made to give a sufficient definition of the workpiece surface, and this model represents the collision contour of the present claims. Paragraph [0039] states that the workpiece will be machined with a five-axis milling machine, such that the tool inclination may be adjusted around two of the axes. Paragraph [0043] states that the tool is provided with a 1st guide/defined path. Paragraphs [0055-0057] discuss that the tool may improperly collide with the workpiece surface, such that a 2nd guide path is provided by controlling the slope angle of the axis 1 of the tool. Paragraph [0059] discusses the “automatic (automated) collision avoidance.” The steps discussed in paragraphs [0055-0057] constitute monitoring and comparing. Regarding claim 10, the CAD model considers every surface of the workpiece, such that there are at least first and second surfaces/collision contours. Note how the description of figures 8 and 9 discusses protection of collision of the tool with any surface in a zone. Regarding claim 13, paragraphs 0056-0057 discuss comparing the tool location with the entire workpiece shape, including the

Art Unit: 3726

situation “In the case that a spatial interference is found in a place *other than the working portion of the tool 2*, the present method can include the *step of predicting a collision between the two spatial envelopes.*” This “predicting” constitutes an error protocol/error message. Regarding claims 14-15, the tool shapes of figures 1a, 1b, and 1c, the envelopes of figures 8a, b, and c, and paragraph [0062] make it clear that Koch has contemplated the tool geometry when making sure that the tool will not improperly contact the workpiece. Regarding claims 19 and 27, the CAD model encompasses all parts of the workpiece, including edges. Regarding the generation of a collision signal of claim 21, and noting that paragraph [0055-0056] states that the Koch method includes noting “a heightened risk of collision,” and that the path of the tool is then controlled/altered “in a manner that minimizes the danger of a collision,” the indication that there is a heightened risk of collision constitutes the act of “generating a collision signal,” and this signal is inherently an “error message/protocol” as per claims 22 and 23.

3. Any inquiry concerning the content of this communication from the examiner should be directed to Daniel Howell, whose telephone number is 571-272-4478. The examiner’s office hours are typically about 10 am until 6:30 pm, Monday through Friday. The examiner’s supervisor, David Bryant, may be reached at 571-272-4526.

In order to reduce pendency and avoid potential delays, Group 3720 is encouraging FAXing of responses to Office actions directly into the Group at FAX number to 571-273-8300. This practice may be used for filing papers not requiring a fee. It may also be used for filing papers which require a fee by applicants who authorize charges to a USPTO deposit account. Please identify Examiner Daniel Howell of Art Unit 3726 at the top of your cover sheet.

/Daniel W. Howell/

Primary Examiner, Art Unit 3726